

Montana Department of Natural Resources and Conservation Water Resources Division Water Rights Bureau
<b>ENVIRONMENTAL ASSESSMENT</b> <b>For Routine Actions with Limited Environmental Impact</b>

**Part I. Proposed Action Description**

1. Applicant/Contact name and address: St. Labre Educational Association  
PO Box 216  
Ashland, MT 59003
2. Type of action: Application For Beneficial Water Use Permit  
42C-30050134
3. Water source name: Groundwater (Tongue River alluvial aquifer)
4. Location affected by project: E½ Section 3 Township 3S Range 44E, Rosebud County  
W½ Section 2 Township 3S Range 44E, Rosebud County
5. Narrative summary of the proposed project, purpose, action to be taken, and benefits:

This application proposes to withdraw water from an alluvial aquifer within the Tongue River valley for the purpose of providing institutional water for the St. Labre Indian School near Ashland, MT. Two supply wells located in the NESWNE of Section 3, Township 3S, Range 44E have been constructed to produce the requested flow rate of 100 gpm and annual volume of up to 62.29 AF. Water is to be diverted year round (January 1 to December 31), treated, and stored in a water tank; from there, water is gravity fed to the school. Currently, the school serves approximately 600 students and staff; including 92 residences and dormitory housing for an additional 125 students.

The DNRC shall issue a water use permit if an applicant proves the criteria in 85-2-311 MCA are met.

6. Agencies consulted during preparation of the Environmental Assessment:  
(include agencies with overlapping jurisdiction)

Montana Department of Environmental Quality Website – TMDL 303d Listing  
 Montana National Heritage Program Website – Species of Concern  
 United States Fish and Wildlife Website – National Wetland Inventory  
 Montana Department of Fish Wildlife and Parks – Dewatering Concern Areas  
 Montana Bureau of Mines and Geology – Geologic Map, Lame Deer 30'x60' Quadrangle

**Part II. Environmental Review**

1. Environmental Impact Checklist:

## PHYSICAL ENVIRONMENT

### **WATER QUANTITY, QUALITY AND DISTRIBUTION**

**Water quantity** - *Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

*Determination:* No impact

The source is groundwater within the Tongue River alluvial aquifer and stream depletion has been estimated at 0.09 cfs. Within the area of affect The Tongue River is not listed by the Montana DFWP as chronically or periodically dewatered stream.

**Water quality** - *Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

*Determination:* No impact

Tongue River (Hanging Woman Creek to Beaver Creek) is listed on the Montana DEQ website, Clean Water Act Information Center. Aquatic Life and Warm Water Fisheries have been impaired due to flow modification, streambank modification/destabilization, irrigated crop production, and natural sources. No significant effects to water quality are anticipated due to the nature of the proposed appropriation. Stream depletion within the Tongue River will be approximately 0.09 cfs.

**Groundwater** - *Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

*Determination:* No impact

The proposed appropriation is located within a shallow alluvial aquifer believed to be connected to the Tongue River. The alluvial aquifer is surrounded by bedrock/alluvial contacts to the east and west. These contacts are believed to be no-flow boundaries and will limit the extent of the cone of depression. No other users were identified as obtaining water from this location within the alluvial aquifer. Depletion of the Tongue River has been projected to be 0.09 cfs.

**DIVERSION WORKS** - *Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

*Determination:* No impact

Wells were installed by Ron Askins Drilling of Miles City, MT, a licensed well drilling company, per Title 37, Chapter 43 MCA and Title 36, Chapter 21 ARM. Stream flow within the Tongue River will be diminished by approximately 0.09 cfs.

## **UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

**Endangered and threatened species** - *Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern,” or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or “species of special concern.”*

*Determination:* No impact

The Montana Natural Heritage Program website did not show any threatened or endangered fish, wildlife, plants or aquatic species or any “species of special concern” that could be impacted by the proposed project.

**Wetlands** - *Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

*Determination:* Minor impact

No maps from the National Wetlands Inventory (NWI) are available in the vicinity of this proposed project. However, provisional mapping has been completed from NAIP imagery by the Montana Natural Heritage Program. Areas within the Tongue River valley near the project location have been provisionally mapped by as riparian forested (most dominant), riparian scrub/shrub, Riverine, and Palustrine. These features appear to be controlled by the seasonal fluctuations of the Tongue River; thus, no significant impact is expected related to this groundwater development.

**Ponds** - *For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

*Determination:* Not Applicable

No ponds were found within the potential area of affect.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

*Determination:* No impact

Groundwater is being diverted from Holocene-aged alluvial sand and gravel deposits of the Tongue River valley. This formation is underlain by relatively impermeable Paleocene-aged interbedded sands, shales and silts of the Fort Union Formation. Water will be pumped to a treatment plant and stored in a storage tank. Water is only to be used for institutional purposes

not including irrigation. As such, the proposed appropriation will not alter soil quality, stability or moisture content.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

*Determination:* No impact

Typical short term construction activities associated with well construction may cause short-term disturbances to vegetation cover. It is the responsibility of the property owner to control noxious weeds on their property.

**AIR QUALITY** - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

*Determination:* No impact

**HISTORICAL AND ARCHEOLOGICAL SITES** - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project if it is on State or Federal Lands. If it is not on State or Federal Lands simply state NA-project not located on State or Federal Lands.*

*Determination:* NA-project not located on State or Federal Lands.

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

*Determination:* No impacts not already assessed.

## **HUMAN ENVIRONMENT**

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

*Determination:* No impact

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

*Determination:* No impact

**HUMAN HEALTH** - *Assess whether the proposed project impacts on human health.*

*Determination:* Positive impact

Project provides new sanitary water supply system with increased efficiency and reliability.

**PRIVATE PROPERTY** - Assess whether there are any government regulatory impacts on private property rights.

Yes \_\_\_ No X If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

Determination:

**OTHER HUMAN ENVIRONMENTAL ISSUES** - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- |                                                                 |           |
|-----------------------------------------------------------------|-----------|
| (a) <u>Cultural uniqueness and diversity?</u>                   | None      |
| (b) <u>Local and state tax base and tax revenues?</u>           | None      |
| (c) <u>Existing land uses?</u>                                  | None      |
| (d) <u>Quantity and distribution of employment?</u>             | None      |
| (e) <u>Distribution and density of population and housing?</u>  | None      |
| (f) <u>Demands for government services?</u>                     | None      |
| (g) <u>Industrial and commercial activity?</u>                  | None      |
| (h) <u>Utilities?</u>                                           | None      |
| (i) <u>Transportation?</u>                                      | None      |
| (j) <u>Safety?</u>                                              | Increased |
| (k) <u>Other appropriate social and economic circumstances?</u> | None      |

**2. *Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: None identified

Cumulative Impacts: None identified

**3. *Describe any mitigation/stipulation measures:***

**4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:***

### *PART III. Conclusion*

**1. Preferred Alternative**

None

**2 Comments and Responses**

None

**3. Finding:**

Yes\_\_\_ No X Based on the significance criteria evaluated in this EA, is an EIS required?

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:*

An EA is the appropriate level of analysis for this proposed action because no significant impacts have been identified as a result of the proposed action.

*Name of person(s) responsible for preparation of EA:*

*Name:* Brad Bennett

*Title:* Hydrologist/Specialist

*Date:* August 2, 2011